Solving Shipments

Instructions

- You are the data analyst of a major hardware manufacturer. The company has four manufacturing plants that serve three regions. As the company's Excel wizard, you have been asked to optimize the manufacturing process to minimize the total cost. Specifically, how many product units should be manufactured at each factory? And how many units should be shipped from each factory to each of the three regions? Use Excel's `Solver` to find out the answer.
- Refer to the below for clarification on terminology used in the spreadsheet:
- **Unit cost**: the cost to manufacture each unit of the product plus the shipping cost to each region.
- **Regional demand**: the number of units the company must produce and ship to each region. Hint: this number must be met.
- **Units in**: the number of units received by each region.
- **Capacity**: the number of units each factory is capable of manufacturing in a given period of time.

Hints

- Identify the **target**, **changing cells**, and **constraints**. Does the optimization call for maximization or minimization? Which `Solver` method will you need to use?